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UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL ADJUSTMENT ADMINISTRATION

1937 AGRICULTURAL CONSERVATION PROGRAM . . . . . NORTHEAST REGION

14 WAYS TO CONSERVE SOIL AND  
QUALIFY FOR PAYMENTS IN VERMONT

SOIL-BUILDING PRACTICES

	Page
1. LIMING CROPLAND AND PASTURE.....	3
2. USING PHOSPHORIC ACID WITH SOIL-CONSERVING CROPS.....	4
3. USING POTASH WITH SOIL-CONSERVING CROPS.....	4
4. USING NITROGEN WITH SOIL-CONSERVING CROPS....	4
5. SEEDING CLOVER.....	5
6. SEEDING ALFALFA.....	6
7. GROWING SMALL GRAINS OR ANNUAL GRASSES AS GREEN-MANURE CROPS.....	7
8. GROWING LEGUMES AS GREEN-MANURE CROPS.....	7
9. MULCHING ORCHARDS.....	7
10. EXCLUDING LIVESTOCK FROM MAPLE SUGAR ORCHARDS.....	7
11. PLANTING FOREST TREES.....	7
12. IMPROVING WOODLANDS.....	8
13. BUILDING 2-STRAND WOODLAND PASTURE FENCES...	8
14. BUILDING 3-STRAND WOODLAND PASTURE FENCES...	8

TO VERMONT FARMERS:

By doing one or more of the 14 things listed above you can qualify for payments under the 1937 Agricultural Conservation Program. The payments will cover part of the out-of-pocket cost of using the practices. This leaflet gives in detail the rates of payment for each of these practices and tells just what to do to be eligible for a payment. The payments and the rates given are contingent upon Congress making available for 1937 the full amount of money authorized in the Soil Conservation and Domestic Allotment Act.

Probably there is nothing unfamiliar in this list of soil-building practices. All of them are suited to conditions in Vermont and have been encouraged by the State extension service. The practices for the State were recommended by county and State committees in Vermont and approved by the United States Secretary of Agriculture.



Many successful Vermont farmers have been using these practices for years. Liming, for instance, is needed for sweetening acid soils. The soil on many farms in the State needs either phosphoric acid, potash, nitrogen, or combinations of the three to supply the proper plant food. Turning under green-manure crops enriches the soil.

The national agricultural conservation program aims at conserving and improving national farm resources. The program for Vermont carries out the principles of the national program in ways especially suited to Vermont.

After you find out just how the program will help you carry out your plans for good farming, you will need to discuss these plans with your county agent or committeemen to make sure that what you intend to do can be approved as good land use for your particular farm.

A top limit will be established for the amount which may be earned by adopting soil-building practices on any one farm. "The Soil-Building Allowance" (p. 2) tells how to figure out what that allowance will be for your farm. "Applying for Payment" (p. 8) and "Other Points Affecting Payment" (p. 9) also contain information you will need. Terms such as "cropland" and "open noncrop pasture" have definite meanings in this program. These and other terms are defined on page 10.

### THE SOIL-BUILDING ALLOWANCE

Vermont farmers who properly carry out one or more approved soil-building practices will be eligible for payments within the limits of their soil-building allowances. The soil-building allowance is the total amount which may be earned by using soil-building practices on a farm.

A farmer may earn part or all of the soil-building allowance for a farm, depending upon the approved practices he uses. But he cannot earn more than his allowance, no matter how many practices he uses. Farms not eligible to receive diversion payments for removing land from the production of crops which deplete the soil, such as tobacco, will have allowances of at least \$20 each, even if the items listed below do not add up to that much. The only farms in Vermont eligible for diversion payments are those growing tobacco—Northeast Region Bulletin 101-A tells how the 1937 program applies to these farms. For all other farms, the following items will determine the soil-building allowance:

\$1 for each acre of cropland.

\$1 additional for each acre of cropland in commercial orchards cultivated on the farm on January 1, 1937.

\$1 additional for each acre of cropland on which *only one* crop of commercial vegetables was grown in 1936.

\$2 additional for each acre of cropland on which *two or more* crops of commercial vegetables were grown on the same acreage in 1936.

40 cents for each acre of fenced noncrop open pasture land in excess of one-half of the number of acres of cropland on the farm.

## SOIL-BUILDING PRACTICES

A farmer may choose and carry out any one or more of the following soil-building practices which will help to improve his farm. If a practice calls for the use of particular materials, such as limestone, a farmer may qualify for payment by using equivalent amounts of other material which serves the same purpose.

### LIMING CROPLAND AND PASTURE

**Practice No. 1.**—Applying 1,000 to 6,000 pounds of ground limestone or its equivalent, per acre, to crop or pasture land:

Payment: In area A, \$2 per 1,000 pounds.  
In area B, \$2.50 per 1,000 pounds.

Area A includes Addison, Chittenden, Franklin, Rutland, Windham, and Windsor Counties; area B includes Bennington, Caledonia, Essex, Grand Isle, Lamoille, Orange, Orleans, and Washington Counties.

Payment will be made if lime is applied to cropland or pasture according to the need as determined by soil tests. If soil tests cannot be made, sufficient lime must be applied to conform with good farming practice. The amounts of ground limestone recommended to be applied to soils of varying acidity and for different crops are given below.

The equivalent amounts of other materials also are indicated:

#### ON CLAY LOAM, SILT LOAM, OR LOAM

Reaction	pH	Alfalfa	Clover and grasses	Top dress- ing pasture
		<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Neutral.....	7.0	0	0	0
Slightly acid.....	6.5	0	0	0
Moderately acid.....	6.0	2,000	1,500	1,000
Medium acid.....	5.5	3,000	2,000	1,500
Strongly acid.....	5.0	4,000	3,000	2,000
Very strongly acid.....	4.5	6,000	4,000	2,000

#### ON SANDS OR SANDY LOAM

Neutral.....	7.0	0	0	0
Slightly acid.....	6.5	0	0	0
Moderately acid.....	6.0	1,000	0	0
Medium acid.....	5.5	2,000	1,000	1,000
Strongly acid.....	5.0	3,000	2,000	1,500
Very strongly acid.....	4.5	4,000	4,000	2,000

#### GROUND LIMESTONE EQUIVALENTS (IN POUNDS)

Ground limestone	Hydrated lime	Quick lime	Waste lime <sup>1</sup>	Wet marl	Wood ashes <sup>1</sup>
2,000	1,500	1,100	2,000	2,800	3,000

<sup>1</sup> If materials are wet add 40 percent to figures.

### USING PHOSPHORIC ACID, POTASH, OR NITROGEN WITH SOIL CONSERVING CROPS

**Practices Nos. 2, 3, and 4.**—Applying phosphoric acid, potash, or nitrogen or approved combinations of these materials, to established sod, in pastures, orchards, or hay lands, or in connection with the seeding of biennial or perennial legumes or green-manure crops in orchards.



**Practice No. 2.—Payment for available phosphoric acid, 4 cents per pound.**

Phosphoric acid may be applied, alone or in combination, any time before December 1, 1937, as follows:

1. To established sod in pastures, orchards, or hay lands.
2. In preparation for seeding or at time of seeding biennial or perennial legumes or green-manure crops in orchards. When phosphoric acid is applied in connection with a seeding made in a nurse crop which is harvested for grain, the payment will be made only for amounts of phosphoric acid in excess of 32 pounds per acre.
3. Added, as a preservative and reinforcement, to farm manures that are to be used on established sod or in connection with the seeding of biennial or perennial legumes or green-manure crops. When so used to preserve and reinforce farm manure, not less than 1 pound of 16 or 20 percent superphosphate per mature cow per day shall be used in the gutter.

The minimum amounts of phosphoric acid required when used at the time of seeding down or for top dressing are given below for various crops on different types of soil:

Crop	On clay loam, silt loam, or loam		On sands or sandy loam	
	Pounds of 16 percent super-phosphate per acre	Pounds of phosphoric acid per acre	Pounds of 16 percent super-phosphate per acre	Pounds of phosphoric acid per acre
Alfalfa.....	400	64	500	80
Clover and timothy.....	300	48	400	64
Permanent pasture (top-dressing).....	600	96	600	96
Permanent pasture (seeding down).....	300	48	400	64
Green manure.....	300	48	400	64

**Practice No. 3.—Payment, for available potash, 3 cents per pound.**

Potash may be applied, any time prior to December 1, 1937, alone or in combination with other materials to established sod in pastures, orchards, or hay lands. It may also be applied in connection with the seeding of biennial or perennial legumes, or of green-manure crops in orchards.

The minimum amounts of potash application required for various crops on different soils, when used at the time of seeding down or as top dressing, are given below:

Crop	On clay loam, silt loam, or loam		On sands or sandy loam	
	Pounds of 50 percent potash fertilizer per acre	Pounds of available potash per acre	Pounds of 50 percent potash fertilizer per acre	Pounds of available potash per acre
Alfalfa.....	100	50	150	75
Clover and timothy.....	75	38	100	50
Permanent pasture (top-dressing).....	100	50	150	75
Permanent pasture (seeding down).....	100	50	150	75
Green manure.....	75	38	100	50

**Practice No. 4.—Payment, for available nitrogen, 4 cents per pound.**

Nitrogen may be applied any time prior to December 1, 1937, alone or in combination with other materials to established sod in pastures, orchards, or hay land. It may also be applied in preparation for or at the time of seeding biennial or perennial legumes, or green-manure crops in orchards.

Nitrogen applied to orchards to grow mulch should be broadcast over the entire acreage. No payments will be made for nitrogen used in excess of 32 pounds per acre, or for nitrogen applied to hay land in excess of 24 pounds per acre.

The minimum amounts of application required for top-dressing various crops on different soils follow:

Crops	Applying nitrogen alone	
	Pounds of 16 percent nitro- gen fertilizer per acre	Pounds of available nitrogen per acre
Alfalfa.....	0	0
Clover and timothy.....	0	0
Grass meadows.....	100	16
Grass pastures.....	200	32
Permanent pasture (for early grazing).....	200	32
Green manure.....	200	32

**Practices Nos. 2, 3, and 4 in combination.**—The amounts per acre required for top-dressing when nitrogen, phosphoric acid, and potash are applied in combination on various crops on different types of soil, and for application in preparation for seeding grasses and legumes, are given below:

ON CLAY LOAM, SILT LOAM, OR LOAM

Crop	Pounds of fertilizer per acre	Percent nitrogen	Percent phosphoric acid	Percent potash
Hay.....	300-400	4-6	8-20	6-10
Permanent pasture.....	400-500	4-6	8-20	6-10
Green manure.....	300-400	4-6	8-20	6-10

ON SANDS OR SANDY LOAM

Hay.....	400-500	4-6	8-20	10-20
Permanent pasture.....	500-525	4-6	8-20	10-20
Green manure.....	400-500	4-6	8-20	10-20

SEEDING CLOVER

**Practice No. 5.**—Seeding approved medium red clover or mixtures containing at least 5 pounds per acre of approved medium red clover or its equivalent in other approved clover seed, on land prepared for this seeding by the application of amounts of lime and fertilizer specified below, or on land without such application when soil tests or other evidence satisfactory to the county committee indicate that the application is not needed.  
Payment, \$2 per acre.

The seeding must be made for the purpose of establishing pasture or hay land. The soil should be either supplied naturally with adequate lime or should have had sufficient lime applied at least 6 months in advance of seeding to raise the pH to 6 or more. If lime requirement tests cannot be made, sufficient lime must be in the soil to obtain a good stand.  
Fertilizer requirements prescribed under the heading “Using phosphoric acid, potash, or nitrogen with soil-conserving crops”, must be met at the time of seeding or before.  
Five pounds per acre of adapted northern-grown domestic or Canadian-grown medium red clover seed, or its equivalent in similar alsike clover seed, should be seed alone or in mixtures recommended in the table below. When alsike clover is substituted for medium red clover approximately half the quantity recommended for red clover should be used.



## Recommended seeding mixtures per acre for pasture and hayland:

## PASTURE

For fertile, well-drained soils:		Pounds	For less fertile but well-drained soils:		Pounds
Timothy	-----	4	Kentucky or Canada blue-	-----	8
Kentucky bluegrass	-----	5	grass	-----	8
Orchard grass	-----	4	Orchard grass	-----	4
Redtop	-----	2	Redtop	-----	2
White clover	-----	1	Alsike clover	-----	1
Alsike clover	-----	2	White clover	-----	1
Red clover	-----	2			
Total	-----	20	Total	-----	20
For moist lowlands:			For very moist lowlands:		
Timothy	-----	4	Reed canary grass	-----	6
Redtop	-----	8	Redtop	-----	5
Alsike clover	-----	4	Alsike clover	-----	1
Total	-----	16	Total	-----	12

## HAYLAND

Well-drained soils, not uniform in fertility and type:		Pounds	Soils not well drained:		Pounds
Red clover	-----	6	Red clover	-----	5
Alsike clover	-----	2	Alsike clover	-----	3
Timothy	-----	10	Timothy	-----	8
Total	-----	18	Redtop	-----	2
			Total	-----	18
OR			Wet soils:		
Alfalfa	-----	8	Alsike	-----	6
Red clover	-----	4	Timothy	-----	10
Timothy	-----	7	Redtop	-----	2
Total	-----	19	Total	-----	18

## SEEDING ALFALFA

**Practice No. 6.**—Seeding approved alfalfa or mixtures containing at least 5 pounds of approved alfalfa seed per acre, on land prepared for this seeding by the application of amounts of lime and fertilizer specified through the county committee, or on land without such application when soil tests satisfactory to the committee indicate that the application is not needed. Only hardy, adapted varieties of seed, such as Grimm, Ontario Variegated, Hardigan, and Cossack, may be used.

Payment, \$3 per acre.

The soil either should be supplied naturally with adequate lime or should have had sufficient lime applied at least 6 months in advance of seeding to raise the pH to 6. If lime requirement tests cannot be made, sufficient lime must be in the soil to obtain a good stand.

Fertilizer requirements prescribed under the heading "Using phosphoric acid, potash, or nitrogen with soil conserving crops" must be met at the time of seeding or before.

Drainage of the land must be adequate and approved by the county committee.

Alfalfa should be seeded alone or in the following recommended mixtures: Alfalfa alone, 12 to 15 pounds; mixed—alfalfa, 12 to 15 pounds, timothy, 4 to 6 pounds; or, alfalfa, 12 to 15 pounds, red clover, 4 to 6 pounds, timothy, 4 to 6 pounds.



## GROWING SMALL GRAINS OR ANNUAL GRASSES AS GREEN-MANURE CROPS

**Practice No. 7.**—Plowing or disking under small grains or annual grasses, or mixtures of these, which have attained at least 2 months' or 12 inches' growth.

Payment, \$1.50 per acre.

If this practice is carried out after September 15, 1937, it must be followed by a crop which will protect the land during the winter.

The following crops or mixtures are recommended:

Oats-----	2 to 2½ bushels per acre.	Millet-----	30 to 50 pounds per acre.
Barley-----	1½ to 2 bushels per acre.	Rye-----	1½ to 2 bushels per acre.
Oats and bar- ley.	1 bushel each per acre.		

## GROWING LEGUMES AS GREEN-MANURE CROPS

**Practice No. 8.**—Plowing or disking under biennial legumes or perennial legumes for which no seeding payment has been made under the 1937 or previous programs and from which no crop has been harvested. These legumes must have attained at least 2 months' or 12 inches' growth. Annual legumes which have attained such growth also are acceptable.

Payment, \$2.50 per acre.

The following crops and mixtures are recommended:

Crimson clover (annual)-----	15 pounds per acre.
Soybeans (annual)-----	60 to 90 pounds per acre.
Sweet clover (biennial)-----	15 to 20 pounds per acre.
Mixtures containing legumes as given for hay under practice 5 in this bulletin (perennial).	

## MULCHING ORCHARDS

**Practice No. 9.**—Applying to orchards not less than 2 tons per acre of mulching material in addition to leaving in the orchard all materials produced therein during 1937 from grass, legumes, or green-manure or cover crops.

Payment, on an amount not in excess of 5 tons per acre, \$2 per ton.

## EXCLUDING LIVESTOCK FROM MAPLE SUGAR ORCHARDS

**Practice No. 10.**—Excluding livestock from maple-sugar orchards which have normally been pastured.

Payment, \$1 per acre.

To be classified as a maple-sugar orchard, the land must have at least five sugar maple trees per acre suitable to be tapped. These trees must make up at least one-fourth of the trees on the land. If payment is made for this practice, payment will not be made for carrying out either practice 13 or practice 14 on the same area.

## PLANTING FOREST TREES

**Practice No. 11.**—Planting transplanted forest trees of approved varieties at the rate of 1,000 trees per acre.

Payment, \$10 per acre.

Trees should be evenly distributed approximately 6 feet apart and should be protected against livestock grazing.

When white pine plantings are made, currant and gooseberry bushes within 1,000 feet of the planting site should be removed.

The following are recommended varieties of trees which may be planted on the type of soil indicated.

On well-drained loams: Softwood—northern white pine, red pine, Norway spruce, white spruce; hardwood—white ash, basswood, sugar maple.



On very light sandy or gravelly soils: Softwood—northern white pine, red pine, Scotch pine.

On areas of excess moisture: Softwood—eastern hemlock; hardwood—black ash, American elm.

Other varieties may be planted if the county committee, upon advice of the State extension forester, approves the selection.

### IMPROVING WOODLANDS

**Practice No. 12.**—Improving the stand of forest trees by cutting weed trees or thinning or pruning other trees, to develop at least 100 potential timber trees of desirable species well distributed over each acre of woodland.

Payment, \$3 per acre.

A farmer should obtain the advice and approval of the county committee to develop and carry out a system of woodlot management applicable to his farm. The county agent will supply him with an application blank to fill out and return for approval.

The woodlot must be inspected by a representative of the county committee who is qualified to assist the farmer in developing a system of management for the woodlot. The representative will be able to give the farmer approved instructions. When the farmer has completed the practice, his work will be reviewed by the representative of the committee.

### BUILDING 2-STRAND WOODLAND PASTURE FENCES

**Practice No. 13.**—Constructing fences consisting of not less than two strands of barbed wire with posts or other suitable supports not more than 1 rod apart, for the purpose of excluding livestock from farm woodland previously used for pasture.

Payment, 15 cents per rod.

If payment is made for this practice, payment will not be made for carrying out either practice 10 or practice 14 on the same area.

### BUILDING 3-STRAND WOODLAND PASTURE FENCES

**Practice No. 14.**—Constructing fence consisting of not less than three strands of barbed wire, or of woven wire at least 24 inches high with not less than one strand of barbed wire, with posts or other suitable supports not more than 1 rod apart, for the purpose of excluding livestock from farm woodland previously used for pasture.

Payment, 20 cents per rod.

If payment is made for this practice, payment will not be made for carrying out either practice 10 or practice 13 on the same area.

### APPLYING FOR PAYMENTS

To be eligible to participate in the 1937 program, a farmer should make out the necessary forms and supply the necessary information, which should be filed with the county committee within time limits established by the State committee with the approval of the Director of the Northeast Division of the Agricultural Adjustment Administration.

Payment will be made only upon application on the proper form, filed with the county committee within the time fixed by the Secretary of Agriculture, supported by any necessary information regarding farming operations.

Application for payment may be made by any producer entitled to receive all or a share of the crops or the proceeds of the crops pro-



duced on the farm in 1937, or by any producer who incurs all or any part of the expense of soil-building practices carried out on the farm.

### OTHER POINTS AFFECTING PAYMENT

**RATES OF PAYMENT.**—The rates of payment listed in this leaflet may be increased or decreased by not more than 10 percent, depending upon the number of farmers who take part in the program.

**TIME LIMIT.**—Payments under the 1937 program will be made only for practices carried out before December 1, 1937.

**APPROVAL REQUIRED.**—Payment will be made only if a practice is in line with generally accepted standards of good farming. For that reason, every farmer who plans to carry out a soil-building practice should obtain prior approval from his county committee. In this way he can make sure that the practice is suitable to his farm and that the materials and methods he plans to use are according to approved standards.

**NO DUPLICATION OF PAYMENTS.**—No payment will be made for a practice carried out on any acreage if labor, seed, or other material used in carrying out the practice is furnished free or paid for by a State or Federal agency.

**INCREASE IN ACREAGE OF SOIL-DEPLETING CROPS.**—If a farm has an acreage in 1937 of general soil-depleting crops in excess of 20 acres and larger than the farm's normal acreage of such crops, the Secretary of Agriculture reserves the right to make deductions from payments which otherwise would have been earned. The deduction would be at the rate of \$11.50 per acre.

**1937 OPERATION MUST BE CONSISTENT WITH PROGRAM.**—Payments may be withheld if any rotation, cropping, or other practice which tends to defeat the purpose of the program is adopted in 1937.

**EXPENSES OF ASSOCIATIONS.**—In computing payments, deductions will be made for county agricultural conservation association expenses.

**OTHER GOVERNMENT PROGRAMS.**—On any farm where a program is carried out in cooperation with the Soil Conservation Service or the Resettlement Administration, payment will be made only for carrying out such soil-building practices as are approved for the farm by the county committee, prior to performance, in accordance with special instructions issued by the Secretary of Agriculture governing these cases.

**DIVISION OF PAYMENTS.**—On farms where two or more producers are concerned, the soil-building payment shall be divided among them in proportion to each producer's share of the total expense of carrying out the soil-building practices.

### MEMBERSHIP IN ASSOCIATION

Any person who has an interest in the crops, or proceeds of crops produced on any farm in his county in 1937, shall become a member of the county agricultural conservation association whenever any form or information required in connection with the 1937 program is submitted for the farm in which he is interested, or whenever in 1937 he attends a meeting called for the purpose of electing committeemen. Any person shall cease to be a member of the association if in 1937 he does not file an application for payment within the time specified by the Secretary of Agriculture for the filing of applications

Each county association shall designate a group of persons to assist in the administration of the 1937 program in the county. That group will be known as the county agricultural conservation committee or county committee.

### DEFINITIONS

CROPLAND means farm land which is tillable and on which at least one crop other than wild hay was harvested or planted for harvest between January 1, 1930, and January 1, 1937. It also includes any other farm land devoted on January 1, 1937, to fruit orchards, vineyards, or cultivated bush fruits, if these had not been abandoned.

COMMERCIAL ORCHARDS, as defined under the program, include the acreage on the farm on January 1, 1937, in tree fruits, cultivated nut trees, vineyards, or cultivated bush fruits, from which the principal part of the production is normally sold. They also include the acreage of young nonbearing orchards from which the principal part of the production will be sold in 1937 or later.

COMMERCIAL VEGETABLES refer to vegetables or truck crops from which the principal part of the production was sold off the farm in 1936. These truck crops include among others, potatoes, sweetpotatoes, melons, cantaloups, and strawberries, but exclude sweet corn for canning and peas for canning.

OPEN NONCROP PASTURE refers to fenced noncrop pasture land on which the predominant growth is forage suitable for dairy animals, and on which the number or grouping of any trees or shrubs is such that the land could not fairly be considered as woodland. Each 5 acres of such land must be capable of supporting at least one cow or one horse, or the equivalent in smaller animals, during the normal pasture season. Five sheep, five goats, two calves, or two colts are considered the equivalent of one cow or one horse.





